

TWO NEW GENERA AND TWO NEW SPECIES OF TERULIINE LEAFHOPPERS (HOMOPTERA: CICADELLIDAE: COELIDIINAE)

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ABSTRACT.—Two new genera and two new species of leafhoppers in the tribe Teruliini are described and illustrated. New genera include: *Perspinolidia*, type-species *Perspinolidia peruviansis*, n. sp., and *Brevicapitorus*, type-species *Brevicapitorus elongatus*, n. sp. Both genera are monobasic and occur in the Neotropical region.

Two genera and their attendant species described in this paper represent a continuum of new taxa of a leafhopper group whose presence is rare in the Neotropical region. Only a few specimens are usually collected at any given time, but they add generic diversity and taxonomic composition to the tribe Teruliini (Nielson 1979, 1983a, 1983b). There are now 47 genera assigned to the tribe, 23 of which are monobasic.

The genus *Perspinolidia* represents an anomaly in characterization of the tribe. The median longitudinal clypeal carina, which separates the tribes Teruliini and Coelidiini, is incomplete in *Perspinolidia* and does not reach the anterior margin from its origin at the transclypeal suture. This deficiency may denote variability in the length of the character or an evolutionary state of development in which the carina is being added to or deleted from the clypeus. In either case, the genus is more closely related to members of Teruliini than to members of any other tribe in the subfamily Coelidiinae.

Perspinolidia, n. gen.

TYPE-SPECIES.—*Perspinolidia peruviansis*, n. sp.

Medium-sized, robust species. Similar in general habitus to *Articoelidia* Nielson but with distinctive male genitalia. General color dark brown with suffused light brown on clavus extending to apex of forewing.

Head narrower than pronotum; crown broad, width greater than width of eyes; eyes large, semiglobular; pronotum and scutellum large; forewings with 5 apical cells, 3 ante-apical cells present, outer one closed; clypeus

long and broad, with incomplete median longitudinal carina, originating at the transclypeal suture but not reaching anterior margin; hind femoral setal arrangement 2+2+1.

Male genitalia partly asymmetrical; pygofer with small caudodorsal lobe; aedeagus asymmetrical, long, somewhat tubular with tuft of setae distad of middle near large gonopore on lateral margin; connective Y-shaped with short stem; style large, very broad in lateral view; plate long, broad subapically, setaceous.

The genus keys to *Articoelidia* in couplet 21 in Nielson (1979), but it can be distinguished by the lack of prominent spines on the pygofer and segment 10, the presence of the broad style, and the subdistal tuft of setae on the aedeagus.

Perspinolidia peruviansis, n. sp.

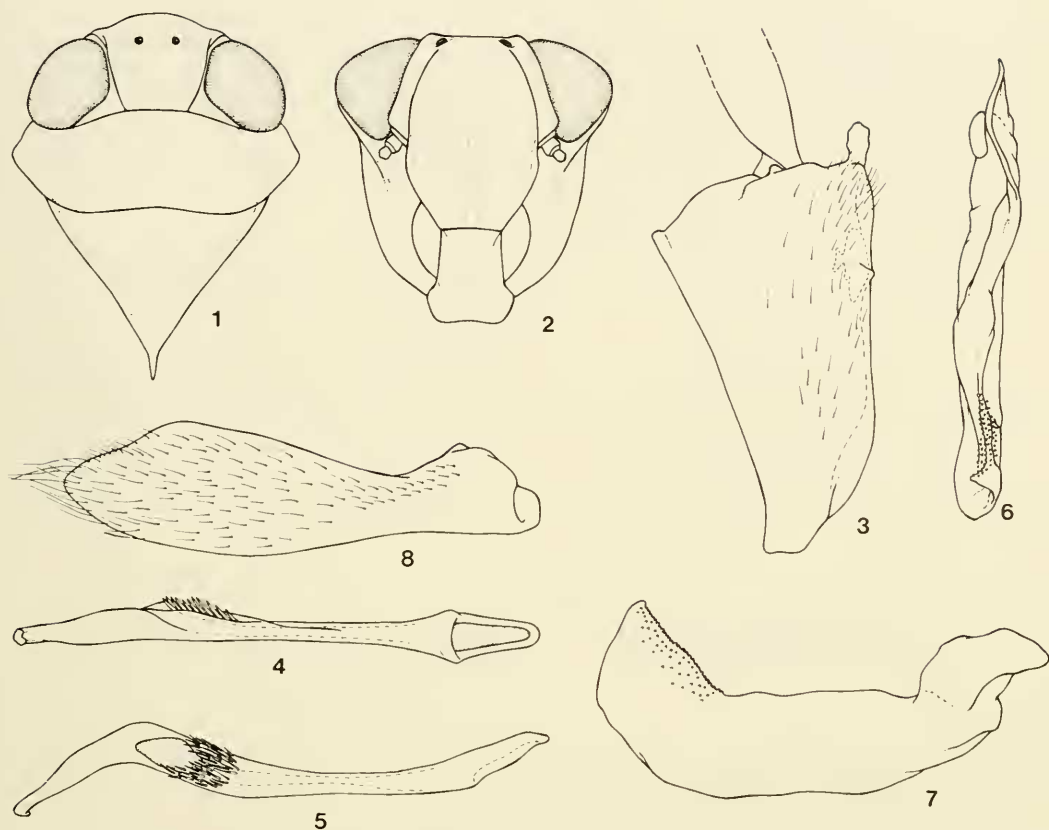
Figs. 1–8

LENGTH.—Male 8.70 mm.

General color dark brown. Crown light tan-nish; pronotum black except for tan anteriolateral margins; scutellum black; forewings dark brown to black except for light brown from base of clavus to apex of wing, costal area light brown; face tan. Similar in general habitus to species of *Articoelidia*, but with distinctive male genitalia.

Head narrower than pronotum (Fig. 1); crown produced and rounded anteriorly, broad, width much greater than width of eyes; eyes large, semiglobular; pronotum moderately long, median length about as long as median length of crown; scutellum large, median length greater than median length of pronotum; forewing and venation typical;

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Figs. 1-8. *Perspinolidia peruvienis*, n. sp.: 1, head, pronotum, and scutellum, dorsal view; 2, face, ventral view; 3, male pygofer, lateral view; 4, aedeagus, dorsal view; 5, aedeagus, lateral view; 6, style, dorsal view; 7, style, lateral view; 8, plate, ventral view.

clypeus long and broad, somewhat tumid, with incomplete median longitudinal carina arising at base of transclypeal suture and extending anteriorly to about 2/3 length of clypeus (Fig. 2).

MALE.—Pygofer with small caudodorsal lobe directed dorsally (Fig. 3); aedeagus asymmetrical, long, somewhat tubular, sinuate in lateral view and tapered toward apex, with tuft of dense, stout setae on lateral margin just basad of gonopore (Figs. 4, 5), gonopore large, subdistal on lateral margin; style large, compressed laterally and very broad in lateral view, dentate apically on dorsal margin (Figs. 6, 7); plate moderately long, lateral margins expanded before apex (Fig. 8).

FEMALE.—Unknown.

HOLOTYPE (male).—PERU: Río Santiago, 30.IX.1924. H. Bassler, F-6137, Acc. 33591 (AMNH).

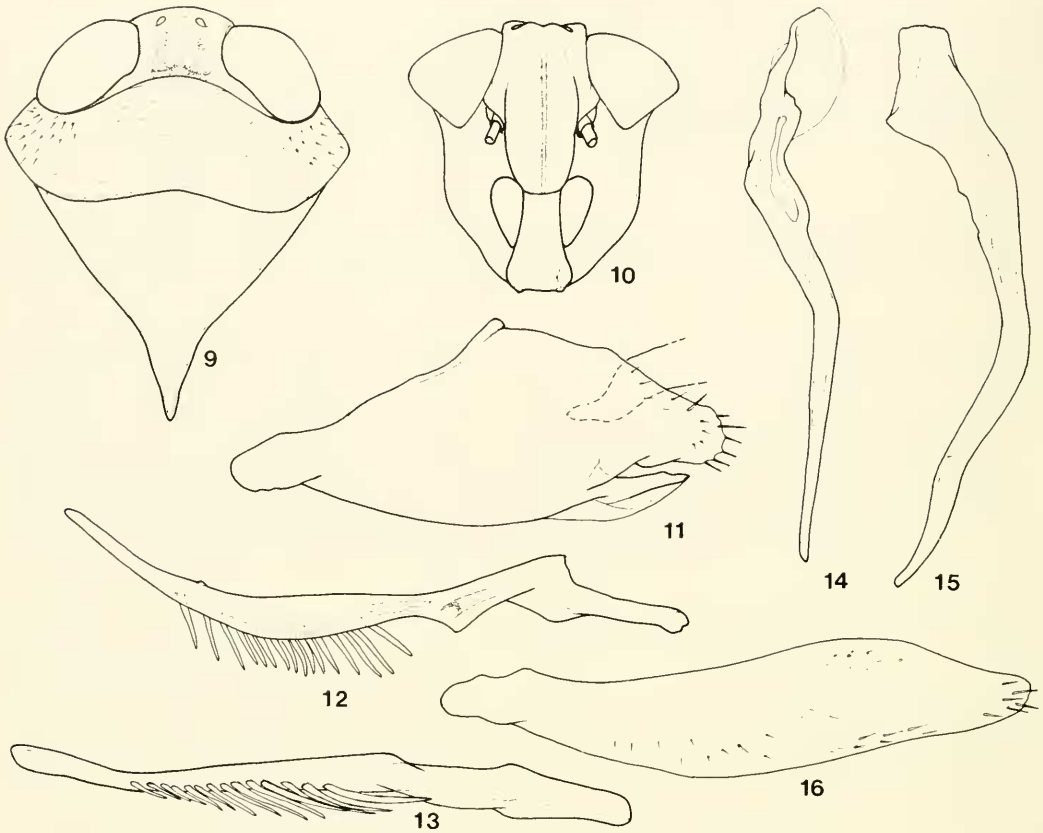
REMARKS.—*Perspinolidia peruvienis* is the only known species in the genus, and it can be distinguished from members of *Articoelidia* by the incomplete median clypeal carina, by the lack of spines on the pygofer and segment 10, and by the presence of a subdistal tuft of setae on the aedeagus.

Brevicapitorus, n. gen.

TYPE-SPECIES.—*Brevicapitorus elongatus*, n. sp.

Medium-sized, robust species. Similar in general habitus to large species of *Docalidia* Nielson, but with distinctive male genitalia. General color black.

Head distinctly narrower than pronotum; crown short, broad, about as wide as eyes; eyes large, semiglobular; pronotum and scutellum large; forewings with 5 apical cells, 3 antepical cells present, outer one closed;



Figs. 9-16. *Brevicapitorus elongatus*, n. sp.: 9, head, pronotum, and scutellum, dorsal view; 10, face, ventral view; 11, male pygofer, lateral view; 12, aedeagus, lateral view; 13, aedeagus, ventral view; 14, style, dorsal view; 15, style, lateral view; 16, plate, ventral view.

clypeus long and narrow, with complete median longitudinal carina; hind femoral setal arrangement 2+2+1.

Male genitalia partly asymmetrical; pygofer with large caudoventral lobe; aedeagus asymmetrical, long, somewhat tubular with single row of stout setae along middle, gonopore subbasal; connective Y-shaped with short stem; style very long; plate long, narrow.

The genus keys near *Terulia* Stål in couplet 5 of Nielson (1979) and can be separated by a row of stout setae along the middle of the aedeagus and by the very short, rounded head.

Brevicapitorus elongatus, n. sp.

Figs. 9-16

LENGTH.—Male 9.70–9.90 mm.

General color black. Crown and eyes light tannish brown, disk blackish in basal half;

pronotum and scutellum black; forewings dark brown to black, veins black; face black. Similar in general habitus to species of *Docalidia* but with distinctive male genitalia.

Head much narrower than pronotum (Fig. 9); crown short, rounded anteriorly, disk broad, width nearly equal to width of eyes; eyes large, semiglobular; pronotum large, median length much greater than median length of crown; scutellum large, median length greater than median length of pronotum; forewing broad, apex acutely angled, venation typical; clypeus long and narrow, with prominent median longitudinal carina (Fig. 10); clypellus long, lateral margins expanded distally.

MALE.—Pygofer with broad caudoventral lobe (Fig. 11); aedeagus asymmetrical, long, somewhat tubular in dorsal view, slightly curved in lateral view and expanded between

apex and gonopore, with single row of stout setae along middle of shaft, setae directed more or less laterally (Figs. 12, 13), gonopore subbasal on lateral surface; style very long, nearly as long as aedeagus, curved in dorsal and lateral views, tapered distally (Figs. 14, 15); plate long and narrow, sparsely setose (Fig. 16).

FEMALE.—Unknown.

HOLOTYPE (male).—BRAZIL: Sinop, Matto Grosso, —.X.1975, M. Alvarenga (UFP). Paratype, one male? (abdomen missing), same data as holotype (author's collection).

REMARKS.—This species is the only known representative of the genus, and it can be separated from members of the genus *Docalidia* by the single row of stout spines on the middle of the aedeagal shaft.

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LITERATURE CITED

- NIELSON, M. W. 1979. A revision of the subfamily Coelidiinae (Homoptera: Cicadellidae). III. Tribe Teruliini. Pacific Insects Monograph 35. 329 pp.
- . 1983a. New genera in the tribe Teruliini with descriptions of new species (Homoptera: Cicadellidae: Coelidiinae). J. Kansas Entomol. Soc. 56(4): 560–570.
- . 1983b. New Neotropical species of teruliine leafhoppers (Cicadellidae: Coelidiinae: Teruliini). J. Kansas Entomol. Soc. 56(3): 365–370.